UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,743	07/21/2005	Joerg Barthel	10191/3824	6130

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EXAMINER
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ART UNIT	PAPER NUMBER
2611	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/517,743	BARTHEL ET AL.
Office Action Summary	Examiner	Art Unit	
	LEILA MALEK	2611	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>04 September 2009</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>15-19 and 21-29</u> is/are pending in the application.

　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>15-19 and 21-29</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>08/14/2008</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　a)☒ All b)☐ Some * c)☐ None of:

　　1.☒ Certified copies of the priority documents have been received.

　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   Applicant's request for reconsideration of the finality of the rejection of the last

Office action is persuasive and, therefore, the finality of that action is withdrawn.

Response to Arguments

2.   Applicant's arguments, see pages 6-10 of remarks, filed 09/04/2009, with respect

to the rejection(s) of claim(s) 15-19 and 21-29 have been fully considered and are

persuasive. Therefore, the rejection have been withdrawn. However, upon further

consideration, a new ground(s) of rejection is made in view of Min (US 2002/0063796).

Claim Rejections - 35 USC § 102

> (e) the invention was described in (1) an application for patent, published under section 122(b), by
> another filed in the United States before the invention by the applicant for patent or (2) a patent
> granted on an application for patent by another filed in the United States before the invention by the
> applicant for patent, except that an international application filed under the treaty defined in section
> 351(a) shall have the effects for purposes of this subsection of an application filed in the United States
> only if the international application designated the United States and was published under Article 21(2)
> of such treaty in the English language.

3.   Claims 28, 15, 17, and 27 are rejected under 35 U.S.C. 102(e) as being

anticipated by Min (US 2002/0063796).

As to claim 28, Min discloses a method comprising: generating digital data

streams in a transmitting device (see paragraph 0006) by sampling analog signals (see

paragraph 0006, lines 6 and 7, Although Min does not expressly disclose converting the

signal to digital from analog, from the cited passage it appears that the sampling

frequency is referring to the sampling frequency used by an analog to digital converter

to generate digital signal) at a sampling frequency synchronized by a system time clock

(see paragraph 0006, lines 4-7) in the transmitting device; determining the sampling

frequency of one of the data streams (see paragraphs 0006, lines 7-11, here

determining the sampling frequency is the same as recovering the 27MHZ decoder

clock, because of the relationship between the encoder stable clock and the sampling

frequency (see paragraph 0006, lines 4-7) and paragraph 0015) in the receiving device;

and synchronizing the counter (see Fig. 1, block 3) with the determined sampling

frequency of the one of the data streams (see Fig. 1, blocks 3, 1, 2, and 4 and

paragraph 0021 and paragraph 0055).

As to claim 15, Min discloses setting an increment of the counter (see

paragraphs 0021 and 0055); and determining the increment from a ratio between a

program clock reference (PCR) and the sampling frequency (see Fig. 1, STC counter is

adjusted by the difference (ratio) between the PCR and the sampling frequency (i.e. the

27 MHZ decoder clock)).

As to claim 17, Min discloses comparing an instantaneous presentation time

stamp (PTS) of a packetized elementary data stream used to determine the sampling

frequency with an instantaneous count of the counter (see paragraph 0021); and

correcting the increment of the counter according to a comparison result (see

paragraphs 0021 and 0055).

As to claim 27, Min discloses that the sampling frequency is determined from a

selected packetized elementary data stream of different packetized elementary data

streams (see paragraph 0011, the data stream associated with the first PCR value is

interpreted as the selected packetized data stream); synchronizing all packetized

elementary data streams with the counter (see paragraph 0010, last two lines).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 16, 18, and 19 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Min.

As to claim 16, Min does not expressly disclose setting the increment to a

constant value based on a nominal sampling frequency. However, it would have been

obvious to one of ordinary skill in the art at the time of invention to set the increment

value to a constant value to make the calculations faster (i.e. without having very

accurate measurements).

As to claim 18, Min does not disclose determining the sampling frequency from

the data stream having the greatest sampling frequency of any of the available data

streams. However, it is well known in the art from Nyquist criterion that a required

sampling rate for sampling a signal of frequency f_0 is at least twice the frequency of the

signal. Therefore, one of ordinary skill in the art would have been motivated to use a

sampling rate which is at least twice the sampling rate of the highest frequency so as to

cover the sampling rate requirement of the lower frequencies as well.

As to claim 19, Min discloses that the digital data streams are packetized

elementary data streams (see paragraph 0007) that include video and audio data

streams (see paragraph 0005) according to the Moving Picture Expert Group (MPEG)

standard (see paragraph 0005). Min discloses all the subject matters claimed in claim

19, except that the audio and video signals are in compressed form, however, it would

have been extremely well known in the art at the time of invention to compress the

audio and video signals to save bandwidth in transmission.

5.   Claims 29 and 21-26 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Min, in view of Duruoz et al (hereafter, referred as Duruoz) (US 6,363,207).

         As to claim 29, Min discloses a flag extractor (i.e. the PTS detector) that identifies

a presentation time stamp for the purpose of initializing a counter (see paragraph 0021);

a unit for correctly determining a sampling frequency of one of the packetized

elementary data streams (see paragraphs 0006, lines 7-11, here determining the

sampling frequency is the same as recovering the 27MHZ decoder clock, because of

the relationship between the encoder stable clock and sampling frequency (see

paragraph 0006, lines 4-7)); and a synchronization unit for synchronizing the counter

according to the sampling frequency (see Fig. 1, blocks 3, 1, 2, and 4). Min discloses all

the subject matters claimed in claim 29, except for a transport data stream

demultiplexer for demultiplexing a transport data stream into packetized elementary

data streams and an output control unit for synchronizing data streams obtained from

the packetized elementary data streams. Duruoz, in the same field of endeavor,

discloses a receiver device (see the abstract), comprising: a transport data stream

demultiplexer for demultiplexing a transport data stream into packetized elementary

data streams (see the abstract and column 6, lines 43-45) and identifying a presentation

time stamp for the purpose of initializing a system time clock counter (see column 2,

lines 14-16) and an output control unit for synchronizing data streams obtained from the packetized elementary data streams (see column 1, lines 38-40, column 2, lines 23-26, column 9, lines 28-42). It would have been obvious to one of ordinary skill in the art at the time of invention to modify Min as suggested by Duruoz to separate the audio and video signals in order to fully recover the transmitted signals and also it would have been obvious to synchronize the audio and video data streams so that there is a coordinated and coherent reproduction of the desired audio and video signals (see column 1, lines 39-42).

As to claim 21, Min discloses setting an increment of the counter (see paragraph 0021 and 0055); and determining the increment from a ratio between a program clock reference and the nominal sampling frequency (see Fig. 1, STC counter is adjusted by the difference (ratio) between the program clock reference value (PCR) and the sampling frequency (i.e. the 27 MHZ decoder clock)).

As to claim 22, Min does not expressly disclose setting the increment to a constant value based on a nominal sampling frequency. However, it would have been obvious to one of ordinary skill in the art at the time of invention to set the increment value to a constant value to make the calculations faster (i.e. without having very accurate measurements).

As to claim 23, Min discloses comparing an instantaneous presentation time stamp (PTS) of a packetized elementary data stream used to determine the sampling frequency with an instantaneous count of the counter (see paragraph 0021); and

correcting the increment of the counter according to a comparison result (see paragraphs 0021 and 0055).

As to claim 24, Min discloses that the sampling frequency is determined from a selected packetized elementary data stream of different packetized elementary data streams (see paragraph 0011, the data stream associated with the first PCR value is interpreted as the selected packetized data stream); synchronizing all packetized elementary data streams with the counter (see paragraph 0010, last two lines).

As to claim 25, Min does not disclose determining the sampling frequency from the data stream having the greatest sampling frequency of any of the available data streams. However, it is also well known in the art from Nyquist criterion that a required sampling rate for sampling a signal of frequency f_0 is at least twice the frequency of the signal. Therefore, one of ordinary skill in the art would have been motivated to use a sampling rate which is at least twice the sampling rate of the highest frequency so as to cover the sampling rate requirement of the lower frequencies as well.

As to claim 26, Min discloses that the digital data streams are packetized elementary data streams (see paragraph 0007) that include video and audio data streams (see paragraph 0005) according to the Moving Picture Expert Group (MPEG) standard (see paragraph 0005). Min discloses all the subject matters claimed in claim 26, except that the audio and video signals are in compressed form, however, it would have been extremely well known in the art at the time of invention to compress the audio and video signals to save bandwidth in transmission.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEILA MALEK whose telephone number is (571)272-8731. The examiner can normally be reached on 9AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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